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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,227	11/26/2003	George Popescu	YOR920030529US1	9155

7590 11/24/2009
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EXAMINER

MURRAY, DANIEL C

ART UNIT	PAPER NUMBER
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2443

MAIL DATE	DELIVERY MODE
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11/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,227	Applicant(s) POPESCU ET AL.	
	Examiner DANIEL C. MURRAY	Art Unit 2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2443

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 13JUL2009. **Claims 21 and 22** are now pending in the present application. **This Action is made FINAL.**

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made

Art Unit: 2443

in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Filepp et al. (US Patent # 5,758,072)** in view of **Elderton et al. (US Patent # US 6,477,572 B1)** in view further view of **Laiho et al. (US Patent # 6,097,942)** and in further view of **Curtis et al. (US Patent # 5,774,689)**.

a) Consider **claim 21**, Filepp et al. clearly show and disclose, a method for dynamic grouping of clients to support scalable group communications in interactive applications (abstract, column 1 lines 1-36), comprising: identifying an application having an application space (abstract, column 2 lines 52-64, column 5 lines 13-45, column 6 lines 20-25); identifying a plurality of clients of said application such that each of said plurality of clients has a communication interest with said application (abstract, column 1 lines 33-36, column 2 lines 47-64, column 6 lines 20-25); identifying a communication network that handles communications between said plurality of clients and said application and that includes network resources with network characteristics (abstract, column 21 lines 53-62, column 22 lines 48-52, column 23 lines 9-26 lines 44-46, column 24 lines 7-16); partitioning said application space into a plurality of communication interest partitions, each partition of which represents a communication interest of at least one client of said plurality of clients (abstract, column 2 lines 41-64, column 5 lines 13-45, column 6 lines 20-25); indexing the partitions and said network map information to form a multi-type attribute index structure into one of more client groupings (column 2 lines 47-51 lines 52-67, column 3 lines 1-30, column 5 lines 13-45, column 6 lines 20-25, column 72 lines 39-45 lines 52-56, column 75 lines 43-52); and forming a hierarchical structure that includes a parent node and at least one control node for communicating data to said plurality of clients wherein said parent node establishes a communication overlay that

Art Unit: 2443

directs communications between said plurality of clients and said application (column 1 lines 33-36, column 3 lines 4-30). However, Filepp et al. does not specifically disclose network resources with network-level characteristics; mapping said network resources based on said network-level characteristics to produce network map information, grouping said plurality of clients based on their communication interest and on said multi-type attribute index structure, that said hierarchical structure is based on said attribute index structure and on the client groupings, or that parent node produces a membership list comprising one or more of said plurality of clients having an interest in at least one of the plurality of communication interest partitions, wherein said membership list maps into one or more communication groups to enable distributed communication between said plurality of clients and said application.

Elderton et al. show and disclose to generating a network topology display to facilitate application deployment in such an environment, wherein network resources have network-level characteristics (identity and characteristics of the subnet within which the node is operating, the identity of the router to which the object is connected, and the like)(column 6 lines 21-35, column 7 lines 20-48); and mapping said network resources based on said network-level characteristics to produce network map information (view a collection of objects by network path, by location, by gateway, by attribute (grouping symbols of like attributes))(abstract, column 2 lines 1-4 lines 40-49, column 6 lines 4-16 lines 21-51, column 7 lines 20-48).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate mapping said network resources based on said network characteristics to produce network map information, as taught by, Elderton et al. into the system of Filepp et al. for the purpose of displaying information in a network topology map according to network object attributes (Elderton; column 2 lines 1-4). However, Filepp et al. as modified by

Art Unit: 2443

Elderton et al. does not specifically disclose grouping said plurality of clients based on their communication interest and on said multi-type attribute index structure, that said hierarchical structure is based on said attribute index structure and on the client groupings, or that parent node produces a membership list comprising one or more of said plurality of clients having an interest in at least one of the plurality of communication interest partitions, wherein said membership list maps into one or more communication groups to enable distributed communication between said plurality of clients and said application.

Laiho shows and discloses to providing services in a mobile communications network, and more particularly, to defining and updating such services based upon groupings of mobile subscribers wherein, a plurality of clients is grouped based on their communication interest and that a membership list of clients having an interest in at least one communication interest partition, wherein said membership list comprising one or more of said plurality of clients maps into one or more communication groups to enable distributed communication between said plurality of clients and said application (figure 2, abstract, column 2 lines 33-65).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Laiho into the system of Filepp et al. a modified by Elderton et al. for the purpose of grouping clients based on services (i.e. communication interests). However, Filepp et al. as modified by Elderton et al. as modified by Laiho does not specifically disclose grouping clients based on a multi-type attribute index structure or that the structure is a hierarchical structure based on said attribute index structure and on the client groupings.

Curtis et al. show and disclose a provisioning system that enables the creation and management of assignable inventory for digital communication networks. The network

Art Unit: 2443

configuration system of the present invention is able to logically and electrically configure infrastructure components (IFCs) without requiring a physical relationship for the assignment wherein, objects are grouped based on a multi-type attribute index structure or that the structure is a hierarchical structure based on said attribute index structure and on the client groupings (abstract, column 3 lines 64-67, column 4 lines 1-8 lines 34-44, column 7 lines 62-64, column 8 lines 13-19, column 9 lines 25-35).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Curtis et al. into the system of Filepp et al. as modified Elderton et al. as modified by Laiho by for the purpose of grouping objects (i.e. applications), and therefore users associated with those objects, by attributes.

b) Consider **claim 22**, and **as applied to claim 21 above**, Filepp et al. as modified Elderton et al. as modified by Laiho as modified by Curtis et al. clearly show and disclose, the method of claim 21, wherein the network-level characteristics comprise at least one of: a network position parameter (identity and characteristic of the subnet within which the node is operating, the identify of the route to which the object is connected)(Elderton; column 6 lines 21-35), a network fanout, a network delay, or a network forwarding capacity.

Response to Arguments

6. Applicant's arguments filed 13JUL2009 have been fully considered but they are not persuasive.

Applicant argues that "... the attributes on which Elderton bases the topology map are local or node-level attributes (such as operating system type, available disk space, or the like), and

Art Unit: 2443

not global or network-level attributes (such as network delay, network forwarding capacity, or the like), as claimed by the Applicants.

The Examiner respectfully disagrees; Elderton clearly discloses basing the topology map network-level attributes (column 6 lines 21-35, column 7 lines 20-48). Elderton clearly discloses that an attribute is a given is a characteristic of a node (which is composed of network resources sometimes referred to as objects) and that these attributes (characteristics) can be for example the identity and characteristics of the subnet within which the node is operating, the identity of the router to which the object is connected, and the like, which are clearly network-level characteristics. Elderton also clearly discloses that after the initial map data (topology map data) is compiled the user can view a collection of objects by network path, by location, by gateway, and by attribute (grouping symbols of like attributes), which are also clearly network-level attributes. Elderton clearly discloses the real-time display of user-selected object groupings (topology map). Using the mapper, the system administrator can group symbols of like attributes and then evaluate the amount the bandwidth required for the operation. By using the "View as Collection" function, one or more different views of the network are readily displayed. With this tool, management decisions may be made in real-time, because the administrator can view then-current network configurations, resources, and loads, which are also network-level characteristics. Therefore, Elderton clearly discloses basing the topology map network-level attributes.

Furthermore, Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicant relies (i.e., global attributes) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 2443

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 5,317,742
- US 6,925,431 B1
- US 2005/0177629 A1
- US 2006/0080413 A1
- 6,108,702

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2443

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DCM/

Examiner, Art Unit 2443

/J Bret Dennison/

Primary Examiner, Art Unit 2443